



Monthly Statistical Report

Prepared by the Finance, Accounting, and Statistics Department

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APRIL 1992

SUMMARY

Total deliveries' year-to-year gains of the last several months continued in April, with deliveries rising an unusually large 4.2 percent and averaging a 2.5 percent increase for the year to date. Although much of the apparent increase for April, as in prior months, is primarily a reflection of weak deliveries a year ago, April deliveries, on a seasonally-adjusted basis, appear to have been stronger than in recent prior months. Thus, though it may be a bit premature to conclude that some degree of recovery in petroleum deliveries has definitely been taking place, recent data at least provide some encouragement that this could be the case.

On a year-to-year basis, all major products except resid shared in April's above-average increase. Kerosine jet fuel deliveries, in particular, after lagging behind air travel indicators for the last several months, jumped sharply in April. Gasoline deliveries rose 3 percent over a year ago, though the more recent, month-to-month trend in consumption growth is estimated to have been smaller. Distillate deliveries, with higher highway and rail traffic versus a year ago, showed a 5.1 percent gain for the month, while residual fuel oil's 2.7 percent increase masked inherent weakness in some demand sectors.

Refinery activity also strengthened considerably more than usual in April. Contrasting with the first quarter's five-year low, input to distillation units rose 1.4 percent over last April to a twelve-year high for the month. However, April's surge served mainly to counterbalance the first quarter's weaker performance, and for the year to date, refinery input only matched year-ago levels.

Total imports jumped 7.9 percent from a year ago, mainly because of stronger crude oil imports. Up by nearly 600 thousand B/D from last April and more than 800 thousand B/D from March, total imports reached nearly 8 million B/D for the month, compared with the current underlying trend in U.S. import requirements estimated at around 7.7-7.8 million B/D. Product imports were also stronger than in recent prior months, and were up 2.8 percent from a year ago as well.

Although April's pick-up in refining activity absorbed some of the increase in crude oil imports, crude oil stocks still rose during the month and accounted for most of the 16 million barrel rise in total inventories. Gasoline stocks, which usually decline during the spring, slipped a typical 4 million barrels during April. Though they ended the month below the recent-year average level for the month, they were still 10 million barrels higher than a year ago. Distillate stocks, which at the end of last year had been at their highest December level in five years, fell slightly to 93 million barrels during April, near the low end of end-of-season stocks observed in recent years.

Meanwhile, domestic crude oil output declined 1.5 percent in April versus a year ago. Alaskan production managed to match year-ago levels, interrupting the year-to-year dropoff for that region which had averaged 90 thousand B/D during the first quarter. Lower 48 output for the month fell 2 percent from last April.

PRODUCT SUPPLIED ^{1/}

Gasoline

GAIN PUTS GASOLINE ONLY AT LEVEL OF TWO YEARS AGO.

Gasoline deliveries rose 3 percent in April versus a year ago. With year-to-year gains every month so far this year, deliveries'

year-to-date increase of 2.7 percent gives the appearance of greater strength than has actually been the case, since deliveries in the year-ago period were unusually weak. In fact, the gain in deliveries so far this year has served mainly to return gasoline deliveries to an average 7.1 million B/D for the first four months—only about the same as their level for the same period two years ago. Nevertheless, since the middle of last year, there appears to have been a modest upward trend in gasoline deliveries, running at an annualized rate of about 1 percent.

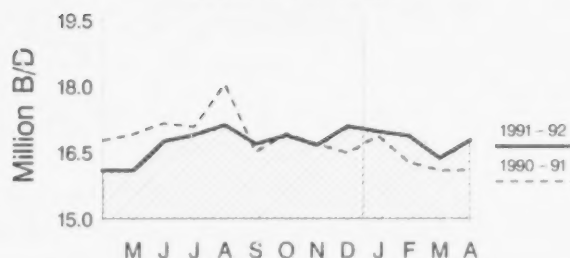
Data on miles traveled are available just through February, and these have also shown relatively strong year-to-year gains of 5.1

percent in January and 4.3 percent in February. The only-modest rate of economic growth over the last several quarters suggests that increases of this size most likely have not been sustained more recently.

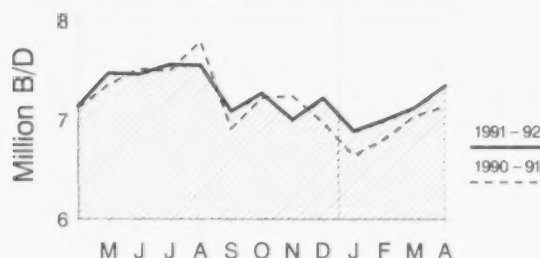
Retail gasoline prices for April rose about 3 cents from March's monthly average, after declining about 8 cents a gallon over the previous four months. Historical data show that March

	API ESTIMATES APRIL		YEAR-TO-DATE	
	Million B/D	Percent Change	Million B/D	Percent Change
Total domestic deliveries	16.8	4.2	16.8	2.5
Crude production ^{2/}	7.3	(1.5)	7.3	(2.1)
Total imports ^{3/}	8.0	7.9	7.4	5.8
Stocks (million bbl) ^{4/}	1,019	0.9	na	na

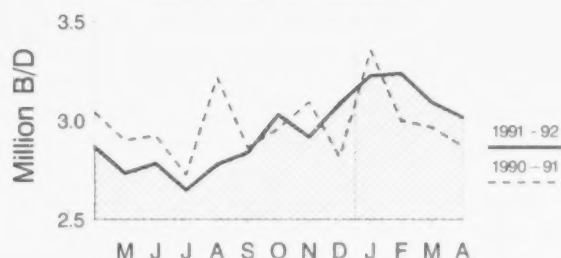
Total Deliveries



Motor Gasoline Deliveries



Distillate Deliveries



Kerosine Jet Fuel Deliveries



has typically been among the low months of the year for retail prices. Prices have in the past averaged 5 to 6 cents higher in early summer than in March, dropping off over the fall and winter.

Such patterns, of course, are more often than not obscured by short-range market developments, and are also subject to shifts in underlying supply and demand fundamentals. With the more stringent summer vapor pressure requirements in 1989, for example, and further tightening of requirements this year, summer gasoline (that is, gasoline meeting requirements for sale for the May-through-mid-September period) has become more costly to produce. To the extent that these increased costs work through to the retail level, this is one factor working towards greater seasonal variation in gasoline prices.

Distillates

TRANSPORTATION, WEATHER BOLSTER DELIVERIES.

Increased consumption of transportation diesel, in conjunction with moderate economic growth, contributed to April's 5.1 percent year-to-year increase in distillate deliveries. Still, given relatively cold weather during the month, growth in deliveries was about 50 thousand B/D below what indicators of consumption would suggest.

Temperatures during April were considerably lower than a year ago. The number of heating degree days climbed more than 30 percent both in the New England and Mid-Atlantic regions, where nearly two-thirds of the nation's heating oil consumption is concentrated. Based on historical relationships, we estimate that colder weather could have contributed to a 90-100 thousand B/D year-to-year increase in heating oil consumption nationwide.

As the heating season comes to a close, however, the focus in distillate markets is shifting to transportation sectors. On an annual basis, consumption of highway and rail distillates accounts for more than 55 percent of total distillate demand. And this share

becomes considerably larger during the spring and summer months.

More so than consumption of heating fuel, transportation distillate demand is sensitive to the level of economic activity. Recently-released government statistics show that the nation's economy has grown very slowly in four consecutive quarters—translating to only a 1.5 percent year-to-year growth rate between the first quarters of 1991 and 1992. To put that in perspective, consider that during the 1982-1989 economic expansion period, annual growth for combined highway/rail diesel consumption averaged 4.1 percent, while gross domestic product growth averaged 3.6 percent. And between 1989 and 1991, in the midst of a stagnant economy, diesel consumption is estimated to have fallen slightly. Thus, the more recent hints of economic growth suggest that demand for diesel transportation fuels may be strengthening as well.

Indeed, indicators of rail and highway diesel demand have strengthened of late. During April, rail ton miles were reportedly up 6-7 percent, year to year. And recent indicators of truck ton miles suggest that highway diesel demand is up in the 7-8 percent range, year to year. Such growth could account for a combined increase in consumption of about 100-110 thousand B/D in these sectors. Although it is true that much of this growth reflects weakness in the year-ago period, we estimate that diesel use has been growing at about a 4 percent annual rate over the past 6 months. Such growth would bring diesel consumption in April near its all time high for the month.

Kerosine Jet Fuel DELIVERIES BEGIN TO REFLECT GAINS IN TRAFFIC.

Deliveries of jet kerosine rose, year to year, during April for the first time since last July. The month's growth, at 9 percent, contrasted sharply with the 6.1 percent decline seen during

the year's first quarter, but came in conjunction with the fourth consecutive month of year-to-year growth in commercial air travel. Even with the large gains in April, however, deliveries have been off 2.2 percent thus far in 1992, while air travel has been up at more than double that rate.

As was the case during the first quarter, April's growth in air travel came against particular weakness a year ago, when air travel (and thus jet fuel consumption) languished in the wake of the Persian Gulf War. Still, passenger travel appears to have strengthened moderately in the past couple of months—even before the stimulative effects of April's air fare discounting was felt. Miles flown by commercial airlines are estimated to have reached an all-time high for April, growing 6-7 percent from a year ago. That rate of growth might have been stronger still, if not tempered by a 2-3 point year-to-year increase in the industry-wide load factor in recent months.

Residual Fuel Oil INCREASE MASKS LONGER-TERM DECLINE TREND.

Although residual fuel oil deliveries gained 2.7 percent year-to-year for April, their recent year-to-year increases

have been possible only because of even weaker deliveries early last year. On net, underlying resid consumption has declined over the last several years, primarily because of market share losses in the utility sector. Year-to-date deliveries, for example, though up 4.8 percent over a year ago, were down roughly 9 percent from two years ago. Since the middle of last year, the trend in consumption has again been weakening, on a month-to-month basis, once typical seasonal variation is taken into account. Nonetheless, growth in overall power generation, increasing waterborne foreign trade, strengthening industrial output, and more competitive resid prices vis-a-vis gas, have kept that decline trend at perhaps about a 5 percent annual rate.

In recent months, residual fuel prices have been as competitive vis-a-vis gas prices as at any time in the past three years. This, coupled with the month's 2 percent year-to-year growth in electricity generation in the East, no doubt worked in resid's favor during April. With resid consumption particularly weak last spring, utility resid consumption was likely up, year to year. However, it appears that any "improvement" of late in utility resid demand is in the way of moderating losses—not in the way of a return to underlying growth. With nuclear plants operating at higher capacity early this year, and with additional gas supplies

entering the Northeast from Canada, resid-burn is thought to be down, on a seasonally-adjusted basis, from levels last summer and last fall.

Meanwhile, in industrial and bunker markets, indicators of resid demand do appear to have strengthened modestly of late. According to government statistics, the industrial sector, which accounts for about 12 percent of resid demand on an annual basis, has been growing moderately since the beginning of the year. The index of industrial production was up about 2 percent year to year in March—the most recent data. Waterborne trade continues to grow as well, particularly for those commodities representing the largest share of oceanborne tonnage—petroleum, coal, and agricultural products.

Other Oils INCREASES STILL SURPASS THOSE OF TOTAL DELIVERIES.

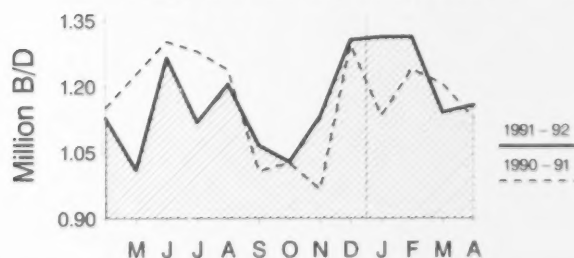
For deliveries of "other oils", year-to-year gains continued to be larger than for deliveries overall, with April rising 6.5 percent. For the year to date, deliveries were up 4.4 percent—nearly two percentage points higher than the rate for total product deliveries.

Although over the past decade, trends in deliveries of "other oils" have tended to track those of total deliveries, in the past two years "other oils" have managed to hold their own and even increase slightly while total deliveries were falling an average 2 percent per year—largely because of demand for petrochemical feedstocks. The year-to-year increase for the first four months of 1992 we estimate to have been more broad-based, representing higher levels for most components of "other oils" versus weak levels in early 1991. However, viewed with a shorter-range perspective over the past several months, on a seasonally adjusted basis, the recent trend for "other oils" appears to have been one of only modest growth.

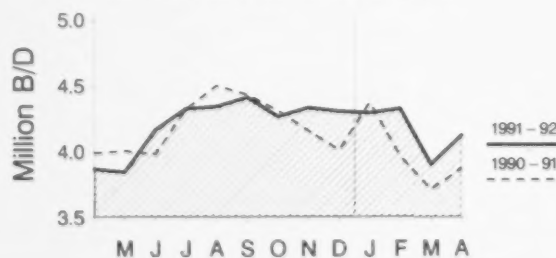
SUPPLY ¹¹ Production ANOTHER DECLINE IN CRUDE OUTPUT.

Domestic crude oil production dropped 1.5 percent, or 113 thousand B/D in April versus one year earlier. This was smaller than declines in recent prior months because the dropoff in Alaskan production, which had been running at 90 thousand B/D in the first quarter, flattened in April. Lower 48 production, however, still fell 2 percent from last

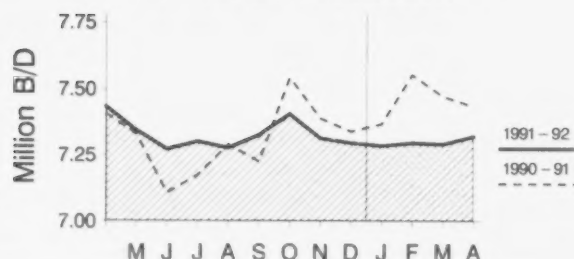
Residual Fuel Oil Deliveries



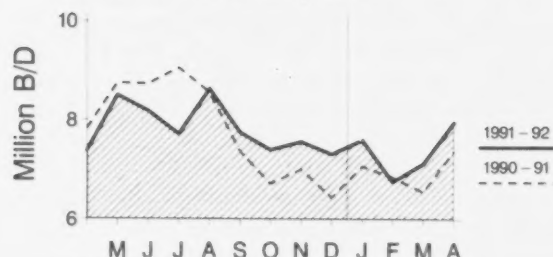
Deliveries of "Other Oils"



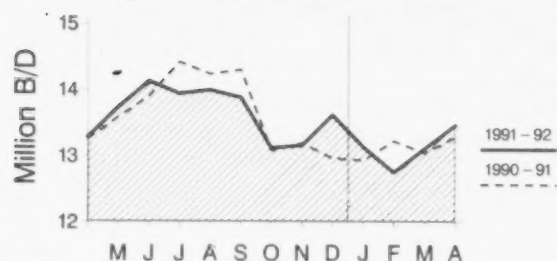
Crude Oil Production



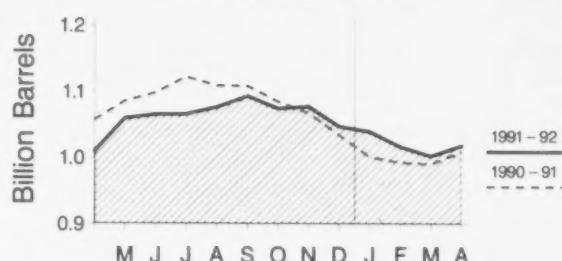
Total Imports



Input to Distillation Units



Total Inventories



April, and continued to indicate a decline rate of 150-200 thousand B/D per year for crude oil production outside Alaska, once allowance is made for typical seasonal patterns.

The falloff in domestic production in part reflects flagging upstream activity. According to API's most recent estimates, total well completions fell 23 percent, year to year, in the first quarter. For oil well completions, the drop was especially sharp at more than 30 percent; gas completions dropped nearly 20 percent. Exploratory completions were unusually weak, dropping below the 1,000 mark to an estimated 840—not much more than half their level of five years earlier. For the last four quarters, exploratory completions have totaled only about 4,275, only a fourth of their level in 1981 and the lowest annual rate in more than forty years. Servicing of existing wells has also dropped sharply. For the first quarter, activity was off 22 percent from a year ago and at its lowest level in five years.

Imports

CRUDE OIL BOOSTS TOTAL IMPORTS.

At nearly 8 million B/D, they were also substantially higher than the prior month's 7.1 million B/D—and were a bit more in line with our estimate of the underlying trend in U.S. import requirements of 7.7-7.8 million B/D. The increase in imports, whether against a year ago or against the prior month, was mainly attributable to an increase for crude oil, imports of which exceeded 6 million B/D for the first time since last August. Though April's more-than-seasonal pick-up in refining activity coincided with higher crude imports, the rise from 5.4 million B/D in March to 6.1 million B/D in April was greater than immediate refining needs and thus also served to build domestic crude oil inventories.

April's product imports were up 2.8 percent, or about 50 thou-

sand B/D, from a year ago, and exceeded first quarter levels by roughly 200 thousand B/D as well. Imports of finished gasoline rose to a relatively strong 430 thousand B/D, up about 60 thousand B/D from a year ago and the highest in eight months. Distillates, at 224 thousand B/D, were off 34 thousand B/D from above-trend shipments a year ago, while kerosine jet fuel imports held even. Residual fuel oil imports, though up from March's unusually low level of less than 300 thousand B/D, dropped about 60 thousand B/D from last April to just under 360 thousand B/D.

As detailed last month, distillate exports, though a relatively small part of the overall supply/demand picture for that product, had surged over the December-January period as a result of weak domestic demand and significant price differentials with foreign markets. Apparently, as conjectured last month, exports have been declining as price differentials narrowed, and February data now show distillate exports slipped to 280 thousand B/D from a high of 360 thousand B/D in January; a further moderation has likely taken place since then.

Refinery Operations

ACTIVITY UP SHARPLY IN APRIL.

Contrasting with the pattern of the first quarter, during which refinery activity fell to a five-year low, inputs to distillation units grew 1.4 percent, year to year, during April—reaching a twelve-year high for the month. It is not unusual for refinery activity to pick up from March to April, although this year's nearly 360 thousand B/D month-to-month increase in inputs was about triple the average of the previous four years. Growth in refinery output was shared by all major products, although skewed toward distillates. Gasoline and jet fuel production grew in the 2 percent range versus last April, while distillate production climbed nearly 5 percent. Resid production, meanwhile, was up fractionally.

This year's first quarter saw an earlier-than-usual turnaround from distillate to gasoline production, thanks to generally mild weather and the resulting weakness in heating fuel demand. However, April's refinery yields of middle distillates (including jet kerosine) surpassed 30 percent, approaching a record high for the month. With distillate inventories relatively low entering the month, refiners apparently increased production to satisfy growing deliveries.

The increased refinery activity pushed utilization of capacity in operation above 90 percent—unusually high for April. As a percentage of reported capacity, utilization, at 86.5 percent, was nearly 2 points higher than last April and 3 points higher than in March.

Inventories

LEAN FOR PRODUCTS, ABOVE AVERAGE FOR CRUDE OIL.

In April, reversing the pattern of the first quarter when total stocks fell 45 million barrels or nearly twice the average seasonal amount, stocks rose 16 million barrels. With the jump in crude imports between March and April exceeding the increase in refinery runs, most of the build occurred in crude oil stocks.

Crude oil inventories rose 14 million barrels to a slightly above-average 353 million barrels.

Gasoline inventories typically fall during the spring, and April's 4 million barrel decline was about in line with that month's average. The decline put month-end gasoline stocks at 216 million barrels, which although below the recent-year average of 225 million barrels for the month, were nevertheless 10 million barrels higher than a year ago. Gasoline stocks have on average fallen 13 million barrels during the second quarter in recent years, following builds during the winter as refinery runs rise seasonally to meet winter demand for heating-related products. In fact, gasoline stocks have played a relatively small role in meeting summer gasoline demand, with stock draws averaging less than 1 percent of deliveries in the previous five June-August periods.

Distillate stocks declined slightly during April to 93 million barrels, near the low end of end-of-heating-season levels of the past several years (distillate stocks reached 90 million barrels in March 1988). Since December, when they were at a their highest year-end level in five years, distillate stocks had been drawn down at a rate about 150 thousand B/D more than average, partially displacing the need for refinery distillate production.

1/ Total supply, i.e., production plus imports adjusted for net stock change is equal to total products supplied from primary storage. Total products supplied from primary storage less exports is equal to total domestic products supplied. Information contained in this report is derived from information published in the API Weekly Bulletin and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions.

2/ Includes lease condensate.

3/ API data do not include crude oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR (according to the U.S. Department of Energy, the SPR held approximately 569 million barrels as of April 30, 1992).

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ESTIMATED UNITED STATES PETROLEUM BALANCE
(Daily Average in Thousands of 42 Gallon barrels)

Products Supplied/Supply From Primary Storage	APRIL			YEAR-TO-DATE		
	1992 ¹	1991 ²	%Change	1992 ^{3R}	1991 ²	% Change
Products Supplied:						
Total motor gasoline	7,350	7,137	3.0	7,093	6,909	2.7
Finished leaded motor gasoline/*	118	278	(57.6)	121	272	(55.5)
Finished unleaded motor gasoline/*	7,232	6,859	5.4	6,972	6,637	5.0
Naphtha-jet	139	156	(10.9)	148	168	(11.9)
Kerosine-jet	1,303	1,195	9.0	1,267	1,295	(2.2)
Distillate fuel oil.....	3,016	2,869	5.1	3,142	3,050	3.0
Residual fuel oil	1,158	1,128	2.7	1,231	1,175	4.8
All other oils ⁴	4,119	3,868	6.5	4,154	3,979	4.4
Reclassified ⁵	-303	-249	21.7	-281	-230	22.2
Total domestic products supplied.....	16,782	16,104	4.2	16,754	16,346	2.5
Exports	1,024	737	38.9	1,053	1,074	(2.0)
Total products supplied.....	17,806	16,841	5.7	17,807	17,420	2.2
Supply:						
Domestic production:						
Crude oil ⁶	7,320	7,433	(1.5)	7,297	7,453	(2.1)
Natural gas liquids.....	1,657	1,656	0.1	1,683	1,662	1.3
Other supply ⁷	1,406	1,002	40.3	1,255	1,110	13.1
Total domestic supply.....	10,383	10,091	2.9	10,235	10,225	0.1
Imports:						
Crude oil, total ⁸	6,050	5,523	9.5	5,605	5,359	4.6
Canadian	781	764	2.2	794	779	1.9
Other.....	5,269	4,759	10.7	4,811	4,580	5.0
Products, total	1,903	1,851	2.8	1,755	1,599	9.8
Residual fuel oil	357	416	(14.2)	367	388	(5.4)
Other.....	1,546	1,435	7.7	1,388	1,211	14.6
Total imports	7,953	7,374	7.9	7,360	6,958	5.8
Total supply.....	18,336	17,465	5.0	17,595	17,183	2.4
Stock change, all oils	530	624	*****	-212	-237	*****
Refinery Operations						
Input to crude oil distillation units	13,461	13,279	1.4	13,114	13,113	0.0
Operable capacity	15,564	15,689	(0.8)	15,623	15,673	(0.3)
Refinery utilization (%) ⁹	86.5	84.6	2.2	83.9	83.7	0.2
Crude oil runs.....	13,297	13,037	2.0	12,901	12,907	0.0
	1992			1991 ²	% Change from	
Stocks (millions bbls.)					Previous	Year Ago
	Apr. 30 ¹⁰	Mar. 31 ¹⁰	Apr. 30		Month	
Crude oil ⁸	353.0	338.9	338.7		4.2	4.2
Unfinished oils	104.9	106.2	112.1		(1.2)	(6.4)
Total motor gasoline/**	216.4	220.0	206.6		(1.6)	4.7
Finished leaded motor gasoline/*	4.0	4.1	7.4		(2.4)	(45.9)
Finished unleaded motor gasoline/*	176.5	177.7	162.8		(0.7)	8.4
Naphtha-jet.....	5.0	4.5	5.7		11.1	(12.3)
Kerosine-jet	35.5	38.9	38.0		(8.7)	(6.6)
Distillate fuel oil	93.3	94.7	102.2		(1.5)	(8.7)
Residual fuel oil.....	38.4	41.0	44.7		(6.3)	(14.1)
All other oils.....	172.1	158.5 ^R	161.1		8.6	6.8
Total all oils.....	1,018.6	1,002.7 ^R	1,009.1		1.6	0.9

1/ Based on API estimated data converted to a monthly basis.

2/ Source: U.S. Department of Energy.

3/ January-February, DOE, March-April, API.

4/ Includes crude losses.

5/ Beginning with January 1981, U.S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassified during the production phase. So that there will be no double counting of these volumes, they are subtracted from the total domestic products supplied.

6/ API estimate; includes lease condensate.

7/ Includes Unaccounted-for crude oil, which will reflect withdrawals from the SPR when they occur, processing gain, field production of other hydrocarbons and alcohol.

8/ Data do not include oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR.

9/ Represents "Input to crude oil distillation units" as a percent of "Operable capacity".

10/ Derived by interpolating API weekly stocks data.

R/ Revised.

/* Included in motor gasoline.

** Includes finished leaded, finished unleaded, and motor gasoline blending components stocks.